

CLAIMS

Therefore, having thus described the invention, at least the following is claimed:

1. A media content recording system in a subscriber television system, comprising:
a memory for storing logic;
a buffer space for buffering a plurality of media content instances; and
a processor configured with the logic to designate as permanent only a media content instance among the plurality of media content instances in the buffer space that is requested by a user for permanent recording.
2. The system of claim 1, wherein the processor is further configured with the logic to provide a user interface, responsive to input from the user, that segregates the media content instances of the buffer space into separately identifiable media content instances and enables the user to select and permanently record at least one of the media content instances.
3. The system of claim 2, wherein the processor is further configured with the logic to enable the user to permanently record a displayed media content instance of the buffer space by selecting a button on an input device during any buffered and displayed frame of the media content instance to be permanently recorded.
4. The system of claim 2, wherein the processor is further configured with the logic to provide the buffered media content instances as entries in a displayed pre-configured list that enables the user to select which entry to be permanently recorded.
5. The system of claim 1, wherein the processor is further configured with the logic to maintain a management file for each of the buffered media content instances, wherein the processor is further configured with the logic to maintain a status flag in the management file wherein the status flag is configured as temporary for a buffered media content instance that is not designated for permanent recording.
6. The system of claim 5, wherein the processor is further configured with the logic to configure the status flag of the management file for a buffered media content instance

3 as permanent when the user requests that said media content instance be permanently
4 recorded, wherein the processor is further configured with the logic to cause the
5 permanently recorded media content instance to have a permanent designation in a file
6 allocation table in response to having the status flag of the corresponding management
7 file configured as permanent, such that the buffer space storing the permanently recorded
8 media content instance becomes designated as non-buffer space.

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1 7. The system of claim 1, wherein the processor is further configured with the logic
2 to use media content instance guide data to determine the start time and stop time of a
3 media content instance buffered into the buffer space.

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1 8. The system of claim 1, wherein the processor is further configured with the logic
2 to determine the receipt time into the buffer space by using the time indicated by an
3 internal clock.

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1 9. The system of claim 1, wherein the processor is further configured with the logic
2 to configure the media content instances as media content instance files.

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1 10. The system of claim 9, wherein the processor is further configured with the logic
2 to randomly generate file names for the media content instance files.

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1 11. The system of claim 9, wherein the processor is further configured with the logic
2 to use titles of the media content instances from media content instance guide data as
3 media content instance file names.

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1 12. The system of claim 11, wherein the media content instance file names include
2 channel number, the media content instance title, and the source of the media content
3 instance.

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1 13. The system of claim 1, wherein the processor is further configured with the logic
2 to cause the buffer space of the permanently recorded media content instance to be
3 designated as non-buffer space.

1 14. The system of claim 1, wherein the processor is further configured with the logic
2 to buffer analog broadcast media content instances, received at a communications
3 interface, as digitally compressed media content instances.

1 15. The system of claim 1, wherein the processor is further configured with the logic
2 to buffer an analog signal received at a connector from a consumer electronics device, as
3 a digitally compressed media content instance.

1 16. The system of claim 1, wherein the processor is further configured with the logic
2 to buffer digital broadcast media content instances, received at a communications
3 interface, as digitally compressed media content instances.

1 17. The system of claim 1, wherein the processor is further configured with the logic
2 to buffer digital media-on-demand media content instances, received at a communications
3 interface from a remote server, as digitally compressed media content instances.

1 18. The system of claim 1, wherein the processor is further configured with the logic
2 to buffer digital media content instances, received at a digital communications port from a
3 local network, as digitally compressed media content instances.

1 19. The system of claim 1, wherein the processor is further configured with the logic
2 to buffer digital media content instances, received at a digital communications port from a
3 local device, as digitally compressed media content instances.

1 20. The system of claim 1, wherein the processor is further configured with the logic
2 to delete the permanently designated media content instance as requested by the user.

1 21. A media content recording system in a subscriber television system, comprising:
2 a memory for storing logic;
3 a buffer space for buffering a plurality of media content instances; and
4 a processor configured with the logic to provide a user interface, responsive to
5 input from the user, that segregates the media content instances of the
6 buffer space into separately identifiable media content instances and
7 enables the user to select and permanently record at least one of the media

content instances, wherein the processor is further configured with the logic to enable the user to permanently record a displayed media content instance of the buffer space by selecting a button on an input device during any buffered and displayed frame of the media content instance to be permanently recorded, wherein the processor is further configured with the logic to select one of the media content instances at any point within a buffered start and end time of the media content instance for permanent recording, wherein the processor is further configured with the logic to maintain a management file for each of the buffered media content instances, wherein the processor is further configured with the logic to maintain a status flag in the management file wherein the status flag is configured as temporary for a buffered media content instance that is not designated for permanent recording, wherein the processor is further configured with the logic to configure the status flag of the management file for a buffered media content instance as permanent when the user requests that said media content instance be permanently recorded, wherein the processor is further configured with the logic to cause the permanently recorded media content instance to have a permanent designation in a file allocation table in response to having the status flag of the corresponding management file configured as permanent, such that the buffer space storing the permanently recorded media content instance becomes designated as non-buffer space, wherein the processor is further configured with the logic to use media content instance guide data to determine the start time and stop time of a media content instance buffered into the buffer space, wherein the processor is further configured with the logic to determine the receipt time into the buffer space by using the time indicated by an internal clock, wherein the processor is further configured with the logic to configure the media content instances as media content instance files, wherein the processor is further configured with the logic to use titles of the media content instances from media content instance guide data as media content instance file names, wherein the media content instance file names include channel number, the media content instance title, and the source of the media content instance, wherein the processor is further configured with the logic to cause the buffer space of the

permanently recorded media content instance to be designated as non-buffer space, wherein the processor is further configured with the logic to buffer analog broadcast media content instances, received at a communications interface, as digitally compressed media content instances, wherein the processor is further configured with the logic to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance, wherein the processor is further configured with the logic to buffer digital broadcast media content instances, received at a communications interface, as digitally compressed media content instances, wherein the processor is further configured with the logic to buffer digital media-on-demand media content instances, received at a communications interface from a remote server, as digitally compressed media content instances, wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local network, as digitally compressed media content instances, wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local device, as digitally compressed media content instances, wherein the processor is further configured with the logic to designate as permanent only the selected media content instance among the plurality of media content instances in the buffer space that is requested by the user for permanent recording, wherein the processor is further configured with the logic to delete the permanently designated media content instance as requested by the user.

1 22. A media content recording method in a subscriber television system, comprising the
2 steps of:

3 buffering a plurality of media content instances into a buffer space; and
4 designating as permanent only a media content instance among the plurality of
5 media content instances in the buffer space that is requested by a user for
6 permanent recording.

1 23. The method of claim 22, further comprising the steps of providing a user
2 interface, responsive to input from the user, segregating the media content instances of
3 the buffer space into separately identifiable displayed media content instances, and
4 enabling the user to select and permanently record at least one of the media content
5 instances.

6 24. The method of claim 23, further comprising the step of enabling the user to
7 permanently record a displayed media content instance of the buffer space by enabling
8 the user to select a button on an input device during any buffered and displayed frame of
9 the media content instance to be permanently recorded.

10 25. The method of claim 23, further comprising the step of providing the buffered
11 media content instances as entries in a displayed pre-configured list that enables the user
12 to select which entry to be permanently recorded.

1 26. The method of claim 22, further comprising the steps of maintaining a
2 management file for each of the buffered media content instances, and maintaining a
3 status flag in the management file, and configuring the status flag as temporary for a
4 buffered media content instance that is not designated for permanent recording.

5 27. The method of claim 26, further comprising the steps of configuring the status flag
6 of the management file for a buffered media content instance as permanent when the user
7 requests that said media content instance be permanently recorded, causing the
8 permanently recorded media content instance to have a permanent designation in a file
9 allocation table in response to having the status flag of the corresponding management

6 file configured as permanent, such that the buffer space storing the permanently recorded
7 media content instance becomes designated as non-buffer space.

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1 28. The method of claim 22, further comprising the step of using media content
2 instance guide data to determine the start time and stop time of a media content instance
3 buffered into the buffer space.

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1 29. The method of claim 22, further comprising the step of determining the receipt
2 time into the buffer space by using the time indicated by an internal clock.

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1 30. The method of claim 22, further comprising the step of configuring the media
2 content instances as media content instance files.

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3 31. The method of claim 30, further comprising the step of randomly generating file
4 names for the media content instance files.

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1 32. The method of claim 30, further comprising the step of using titles of the media
2 content instances from media content instance guide data as media content instance file
3 names.

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1 33. The method of claim 32, wherein the media content instance file names include
2 channel number, the media content instance title, and the source of the media content
3 instance.

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1 34. The method of claim 22, further comprising the step of causing the buffer space of
2 the permanently recorded media content instance to be designated as non-buffer space.

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1 35. The method of claim 22, further comprising the step of buffering analog broadcast
2 media content instances, received at a communications interface, as digitally compressed
3 media content instances.

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1 36. The method of claim 22, further comprising the step of buffering an analog signal
2 received at a connector from a consumer electronics device, as a digitally compressed
3 media content instance.

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1 37. The method of claim 22, further comprising the step of buffering digital broadcast
2 media content instances, received at a communications interface, as digitally compressed
3 media content instances.

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1 38. The method of claim 22, further comprising the step of buffering digital media-
2 on-demand media content instances, received at a communications interface from a
3 remote server, as digitally compressed media content instances.

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1 39. The method of claim 22, further comprising the step of buffering digital media
2 content instances, received at a digital communications port from a local network, as
3 digitally compressed media content instances.

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1 40. The method of claim 22, further comprising the step of buffering digital media
2 content instances, received at a digital communications port from a local device, as
3 digitally compressed media content instances.

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1 41. The method of claim 22, further comprising the step of deleting the permanently
2 designated media content instance as requested by the user.

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2 42. A media content recording method in a subscriber television system, comprising the
3 steps of:

4 buffering a plurality of media content instances;

5 providing a user interface, responsive to input from the user, that segregates the
6 media content instances of the buffer space into separately identifiable
7 media content instances and enables the user to select and permanently
8 record at least one of the media content instances;

9 enabling the user to permanently record a displayed media content instance of the
10 buffer space by selecting a button on an input device during any buffered
11 and displayed frame of the media content instance to be permanently
12 recorded;

13 selecting one of the media content instances at any point within a buffered start
14 and end time of the media content instance for permanent recording;

maintaining a management file for each of the buffered media content instances;

maintaining a status flag in the management file wherein the status flag is
configured as temporary for a buffered media content instance that is not
designated for permanent recording;
configuring the status flag of the management file for a buffered media content
instance as permanent when the user requests that said media content
instance be permanently recorded;
causing the permanently recorded media content instance to have a permanent
designation in a file allocation table in response to having the status flag of
the corresponding management file configured as permanent, such that the
buffer space storing the permanently recorded media content instance
becomes designated as non-buffer space;
using media content instance guide data to determine the start time and stop time
of a media content instance buffered into the buffer space;
determining the receipt time into the buffer space by using the time indicated by
an internal clock;
configuring the media content instances as media content instance files;
using titles of the media content instances from media content instance guide data
as media content instance file names, wherein the media content instance
file names include channel number, the media content instance title, and
the source of the media content instance;
causing the buffer space of the permanently recorded media content instance to be
designated as non-buffer space;
buffering analog broadcast media content instances, received at a communications
interface, as digitally compressed media content instances;
buffering an analog signal received at a connector from a consumer electronics
device, as a digitally compressed media content instance;
buffering digital broadcast media content instances, received at a communications
interface, as digitally compressed media content instances;
buffering digital media-on-demand media content instances, received at a
communications interface from a remote server, as digitally compressed
media content instances;
buffering digital media content instances, received at a digital communications
port from a local network, as digitally compressed media content
instances;

49 buffering digital media content instances, received at a digital communications
50 port from a local device, as digitally compressed media content instances;
51 designating as permanent only the selected media content instance among the
52 plurality of media content instances in the buffer space that is requested
53 by the user for permanent recording; and
54 deleting the permanently designated media content instance as requested by the
55 user.

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